UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,669	03/10/2004	Vinay Gupta	112056-0151U	4140

24267 7590 11/27/2007	EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>14 September 2007</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-49</u> is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-49</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a) ☐ All　b) ☐ Some *　c) ☐ None of:

　　1. ☐ Certified copies of the priority documents have been received.

　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to communications filed on 14 September 2007, claim(s) 1, 19, 27,

33 and 42 is/are amended, and new claim(s) 48-49 is/are added per Applicant's

request. Therefore, claims 1-49 are presently pending in the application, of which,

claim(s) 1, 13, 19, 27, 33, 42 and 48 is/are presented in independent form.

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14

September 2007 has been entered.

3.   In light of Applicant's arguments and amendments, the rejections under 35

U.S.C. 101 have been withdrawn. Applicant's amendments have necessitated new

grounds of rejection.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-4, 6-22, 23-36 and 38-49 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Blumenau (U.S. Pat. No. 6,421,711) in view of VVR ("A Guide to

Understanding Veritas Volume Replicator").

        As to claim 1, Blumenau teaches a system configured to simplify management of

a clustered storage system having a plurality of failover modes (see Abstract), the

system comprising:

        a user interface system that defines a plurality of failover modes (see columns

28-31, "Graphical User Interface for Virtual Ports" and see column 34, line 60 – column

35, line 6); and

        a command set implemented by the user interface system and including a

command for setting a cluster mode where the cluster mode includes at least one of the

plurality of failover modes (see column 33, lines 29-52).

        Blumenau does not explicitly teach wherein each failover mode automatically

configures one or more ports on a selected storage system or a partner storage system

in response to a failover condition.

        VVR teaches wherein each failover mode automatically configures one or more

ports on a selected storage system or a partner storage system in response to a failover

condition (see pages 10-12, section "Recovery after problems").

Therefore, it would have been obvious to one of ordinary skill in the relevant art

at the time the invention was made to modify Blumenau by the teaching of VVR

because "a complete disaster recovery plan is not delivered by any one technology,

service or vendor but rather a culmination of products that are implemented in order to

provide the needed RPO and RTO of an application" (see VVR, page 3, "Introduction").

As to claims 2, 34 and 43, Blumenau, as modified, teaches wherein the user

interface system comprises a command line interface (CLI) configured to support the

command set (see columns 28-31, "Graphical User Interface for Virtual Ports").

As to claims 3, 20-21 and 35, Blumenau, as modified, teaches wherein the

command set further comprises an igroup command that determines whether a set of

initiators may utilize data access command proxying (see columns 12-21, "Storage

Volume Partitioning by Named Groups", where "initiators" is read on "hosts").

As to claims 4, 22 and 36, Blumenau, as modified, teaches wherein the set of

initiators comprises at least one fibre channel world wide name (see figure 5, column

"Host Controller WWN" and see also column 13, lines 33-34, "host controller port

WWN").

As to claims 6 and 38, Blumenau, as modified, teaches wherein the igroup

command sets an igroup option to determine whether members of a set of initiators may

use a partner port for proxying data access command (see column 15, lines 34-60 and

see column 2, line 56 – column 3, line 18).

As to claims 7 and 11, <u>Blumenau</u>, as modified, teaches wherein the command

set further comprises a cfmode command that sets a cluster mode for the clustered

storage system (see column 12, line 65 – column 13, line 6).

As to claims 8, 14, 24, 28, 39 and 45, <u>Blumenau</u>, as modified, teaches wherein

the cluster mode enables the clustered storage system to proxy data access requests

received by a first storage system in the clustered storage system to a second storage

system in the clustered storage system (see column 15, lines 34-60 and see column 2,

line 56 – column 3, line 18 and see column 17, line 9 – column 18, line 5 and see

column 10, lines 16-51).

As to claims 9, 15, 25, 29, 40 and 46, <u>Blumenau</u>, as modified, teaches wherein

the cluster mode enables a first storage system in the clustered storage system to

assume an identity of a second storage system in the clustered storage system (see

column 11, lines 31-56).

As to claims 10, 26, 41 and 47, <u>Blumenau</u>, as modified, teaches wherein the

cluster mode enables proxying of data access requests received by a first storage

system in the clustered storage system to a second storage system in the clustered

storage system and further enables the first storage system to assume an identity of the

second storage system (see column 15, lines 34-60 and see column 2, line 56 – column

3, line 18 and see column 17, line 9 – column 18, line 5 and see column 10, lines 16-51

and see column 11, lines 31-56).

As to claims 12, 16-18, 30-32 and 44, Blumenau, as modified, teaches wherein

the user interface system further comprises a graphical user interface having

functionality to implement the command set (See columns 28-31, "Graphical User

Interface for Virtual Ports". The phrase "having functionality to" renders the rest of the

claim as intended use because the limitations are not positively recited. The limitation of

"to implement the command set" will not be given patentable weight, although it is

taught by Blumenau.).

As to claim 13, Blumenau teaches a method for simplifying management of a

clustered storage system having a plurality of failover modes (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks

and discussions made in claim 7 above.

As to claim 19, Blumenau teaches a system adapted to simplify management of

a clustered storage system having a plurality of failover modes (see Abstract), the

system comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks
and discussions made in claim 2 above.

As to claim 27, <u>Blumenau</u> teaches a computer readable medium, including
program instructions executing on a computer, for simplifying management of a
clustered storage system having a plurality of failover modes (see Abstract), the
computer readable medium including instructions for performing the steps of:

For the remaining steps of this claim applicant(s) is/are directed to the remarks
and discussions made in claim 7 above.

As to claim 33, <u>Blumenau</u> teaches a system (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks
and discussions made in claim 1 above.

As to claim 42, <u>Blumenau</u> teaches a method (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks
and discussions made in claim 13 above.

As to claim 48, <u>Blumenau</u> teaches a system configured to simplify management
of a clustered storage system having a plurality of failover modes (see Abstract), the
system comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks

and discussions made in claim 1 above.

As to claim 49, <u>Blumenau</u>, as modified, teaches wherein the plurality of failover

modes comprises a standby mode, a partner mode, a dual fabric mode, and a mixed

mode (see <u>VVR</u>, pages 10-12).

6.   Claims 5, 23 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable

over <u>Blumenau</u>, as modified, as applied to claims 3, 21 and 35, further in view of <u>Clark</u>

("IP SANs: A Guide to iSCSI, iFCP, and FCIP Protocols for Storage Area Networks",

Published 26 November 2001, Section 8.5, "Internet SCSI").

As to claims 5, 23 and 37, <u>Blumenau</u>, as modified, teaches wherein the set of

initiators comprises one or more identifiers (see columns 9-11, "WWN").

<u>Blumenau</u>, as modified, still does not explicitly teach wherein the identifiers are

iSCSI identifiers.

<u>Clark</u> teaches wherein the identifiers are iSCSI identifiers (see pages 2-4, "iSCSI

Address and Naming Conventions").

Therefore, it would have been obvious to one of ordinary skill in the relevant art

at the time the invention was made to have further modified <u>Blumenau</u>, as modified, by

the teaching of <u>Clark</u> because iSCSI is a well-known alternative to Fibre Channel

technology and "the iSCSI specification allows for a lower functional level on top of IP to

provide services such as IPSec data encryption" (see page 2, section 8.5.2, paragraph 2).

Response to Arguments

7.   Applicant's arguments filed on 14 September 2007 with respect to the rejected claims in view of the cited references have been fully considered but are moot in view of the new grounds for rejection.
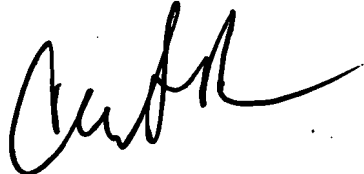
Conclusion

8.   Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.

If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

maxr
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26 November 2007

CHRISTIAN CHACE
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